Datasheet

Enterasys 800-Series

Cost-effective fully-featured enterprise-class 10/100 and 10/100/1000 switch family

Fully featured 10/100 and 10/100/1000 edge connectivity solution

Line rate L2 switching

IEEE 802.3at high power PoE options

Optional redundant power for all models

Enterasys award-winning Lifetime Warranty support

Product Overview

The Enterasys 800-Series is a highly reliable Fast Ethernet and Gigabit Ethernet family of edge switches that provides scalable, wire-rate performance in support of the bandwidth-intensive and delay-sensitive requirements of today's demanding applications.

The 800-Series is comprised of ten models (four 10/100 switches and six 10/100/1000 switches):

- 24 port 10/100 with four SFP uplinks and two 10/100/1000 ports
- 24 port 10/100 PoE with four SFP uplinks and two 10/100/1000 ports
- 48 port 10/100 with four SFP uplinks and two 10/100/1000 ports
- 48 port 10/100 PoE with four SFP uplinks and two 10/100/1000 ports
- 8 port 10/100/1000 with two SFP uplinks
- 8 port 10/100/1000 PoE with two SFP uplinks
- 24 port 10/100/1000 with four SFP uplinks
- 24 port 10/100/1000 PoE with four SFP uplinks
- 48 port 10/100/1000 with four SFP uplinks
- 48 port 10/100/1000 PoE with four SFP uplinks

Up to eight switches can be interconnected to form a single managed entity thereby creating a virtual switch that can be managed with a single IP address to help minimize management requirements. An integral power supply is the primary source of power for all 800-Series switches and complete power redundancy is provided by optional external power supplies.

All PoE switches support IEEE 802.3at which allows up to 30 watts of PoE power to be provided to a single port. Dynamic power allocation is supported which allows unused allocated PoE power to be returned to the central pool for use on other ports. Up to 375 watts of PoE power are available on the 24 port and 48 port PoE models.

End users can be authorized via IEEE 802.1X, MAC address or web-based authentication. Class of service, bandwidth control and Access Control Lists(ACLs) are standard features on all switches.

Most models have fans (the 24 port 10/100 switch is fan-less) but the fans on most of the non-PoE models do not run unless the temperature exceeds 36°C thereby providing quiet operation. There is also built in temperature monitoring that provides high temperature alerts to the end user so that the optimal operating environment can be maintained.

800-Series switches can be managed via a Command Line Interface (CLI) , an excellent web interface or via NetSight, Enterasys' advanced management application.

The 800-Series carries an industry-leading Lifetime Warranty which provides next day shipment, telephone support for one year, bug fixes and web-based support or five years after the product goes end of sale.

Benefits

Business Alignment

- Cost-effective and reliable edge connectivity

Operational Efficiency

- Consolidated management capabilities
- Fully featured CLI, web-based, TACACS+ or NetSight management enabling ease of management thereby lowering Total Cost of Ownership (TCO)

Security

- Network access secured by 802.1x, MAC address and web-based authentication methods

Support and Service

- Industry leading customer satisfaction and first call resolution rates.
- Comprehensive lifetime warranty

There is nothing more important than our customers.

Features / Standards and Protocols

MAC Address Table Size

16,000

VLANs

4,094 VLAN IDs
Up to 4094 Static VLANs
Up to 255 Dynamic VLANs

Switching Services

IEEE 802.1AB – LLDP
ANSI/TIA-1057 – LLDP-MED
    Inventory & Capabilities Only
IEEE 802.1D – MAC Bridges
IEEE 802.1s – Multiple Spanning Trees
IEEE 802.1t – 802.1D Maintenance
IEEE 802.1w – Rapid Spanning Tree
IEEE 802.3 – Ethernet
IEEE 802.3ab – GE over Twisted Pair
IEEE 802.3ad – Link Aggregation
    8 ports per group
    8-port models: 5 groups
    24-port models: 14 groups
    48-port models: 26 groups
IEEE 802.3af – PoE
IEEE 802.3at High Power PoE
    Up to 30W per port
IEEE 802.3az Energy Efficient Ethernet
    08G models only
IEEE 802.3i – 10Base-T
IEEE 802.3u – 100Base-T, 100Base-FX
IEEE 802.3z – GE over Fiber
Full/half duplex auto-sense support on all ports (Auto-MDIX)
ERPS—Ethernet Ring Protection Switching
L2 Multicast Control
IGMP Snooping v1/v2/v3
MLD Snooping
Jumbo Frame support (12,288 bytes)
Loop Protection
One-to-One and Many-to-One Port Mirroring
Port Description
Root Guard

STP Pass-Thru

VLAN Support

Generic Attribute Registration Protocol (GARP)
Generic VLAN Registration Protocol (GVRP)
IEEE 802.1p – Traffic classification
IEEE 802.1q – VLAN Tagging/Trunking
IEEE 802.1 Q-in-Q
Port-based VLAN
MAC-based VLAN
Protocol-based VLAN
Private VLAN
VLAN Trunking
Tagged-based VLAN
Q-in-Q

Quality of Service

8 Priority Queues per Port
802.3x Flow Control
Class of Service (CoS)
Rate Limiting/Bandwidth Control
Layer 2/3/4 Classification
Multi-layer Packet Processing with ACLs
Mixed Queuing Control – Strict and Weighted Round Robin
Source/Destination MAC Address with ACLs
Source/Destination IP address with ACLs
TCP/UDP port number with ACLs

Security

ARP Spoof Protection
DHCP Spoof Protection
EAP Pass Thru
IP Source Guard
IEEE 802.1X Port Authentication
MAC-based Port Authentication
Optional Local Database for Authentication
RADIUS Accounting for network access
RFC 3580 RADIUS Usage Guidelines—no authorization mechanism based on Filter-ID
Secured Shell (SSHv2)
Secured Socket Layer (SSL)
Trusted Host
Denial of Service (DoS) Attack Prevention
BPDU Attack Protection
Multi-user Authentication Per Port
Web-based Port Authentication

Routing

IPv4 Static Routes
IPv6 Default Routing

MIB Support

ANSI/TIA-1057 – LLDP-MED MIB
IEEE 802.1AB – LLDP MIB
IEEE 802.1X MIB – Port Access
IEEE 802.3ad MIB – LAG MIB
RFC 1213 – MIB/MIB II
RFC 1493, RFC 4188 – BRIDGE-MIB
RFC 1643 – Ethernet-like MIB
RFC 2571-2576 – SNMP Framework MIB
RFC 2618 – RADIUS Authentication Client MIB
RFC 2620 – RADIUS Accounting Client MIB
RFC 2674, RFC 4363 – 802.1p MIB
RFC 2674 – QBRIDGE-MIB VLAN Bridge MIB
RFC 2737 – Entity MIB (physical branch only)
RFC 2819 – RMON-MIB
RFC 2863 – IfMIB
RFC 2925—Ping & Traceroute MIB
RFC 3413 – SNMP v3 Applications MIB
RFC 3414 – SNMP v3 User-based Security Module (USM) MIB
RFC 3415 – View-based Access Control Model for SNMP
RFC 3584 – SNMP Community MIB
RFC 3636 MAU MIB — Obsoletes RFC 2668
RFC 4022— MIB for TCP
RFC 4113—MIB for UDP

Management & Other RFCs

Command Line Interface (CLI) with four access levels
Configuration Upload/Download
Firmware Download
Dual IPv4/IPv6 Management Support
Editable Text-based Configuration File
TFTP Client
Command Logging
Connectivity Fault Management (CFM)
Multi-configuration File Support
System Power & Port Status LEDs
NMS Console
NMS Inventory Manager
Cable Diagnostics
Traceroute
Network Load Balancing
Operation, Administration & Maintenance - (OAM) support
RMON (Stats, History, Alarms, Events)
RSPAN—Remote Port Mirroring
Simple Network Management Protocol (SNMP) v1/v2c/v3
SSHv2
TACACS+ authentication
Web-based Management
SYSLOG—up to 4 servers supported
Authentication, Authorization and Accounting (AAA) management
RFC 768 – UDP
RFC 783 – TFTP
RFC 791 – IP
RFC 792 – ICMP
RFC 793 – TCP
RFC 826 – ARP and ARP Redirect
RFC 854 – Telnet
RFC 951, RFC 1542 – DHCP/BOOTP Relay
RFC 1157 – SNMP
RFC 1901 – Community-based SNMPv2
RFC 1981 – Path MTU for IPv6
RFC 2030 – Simple Network Time Protocol (SNTP)
RFC 2131, RFC 3046 – DHCP Client/Relay
RFC 2465 – IPv6 MIB
RFC 2933 – IGMP MIB
RFC 3176 – sFlow
RFC 3413 – SNMP Applications MIB
RFC 3414 – SNMP User-based Security Module (USM) MIB
RFC 3415 – View-based Access Control Model for SNMP

800-Series Switch Model Specifications

	08H20G4-24	08H20G4-24P	08H20G4-48	08H20G4-48P
Performance				
Switching Throughput Mpps	9.5 Mpps	9.5 Mpps	13.1 Mpps	13.1 Mpps
Switching Capacity	12.8 Gbps	12.8 Gbps	17.6 Gbps	17.6 Gbps
MAC Address Table	16K	16K	16K	16K
VLANs Supported	255	255	255	255
PoE Specifications				
802.3af Interoperable	N/A	Yes	N/A	Yes
802.3at Interoperable	N/A	Yes	N/A	Yes
System Power	N/A	375 watts per switch—up to 30 watts per port Per-port switch power monitor: • Enable/disable • Priority safety • Overload & short circuit protection	N/A	375 watts per switch -up to 30 watts per port Per-port switch power monitor: • Enable/disable • Priority safety • Overload & short circuit protection
Physical Specifications				
Dimensions (H x W x D), Rack Units	• 4.4 cm H x 44.1cm W x 21.66cm D • 1.73” H x 17.36” W x 8.53” D • 1U	• 4.4 cm H x 44.1cm W x 36.8cm D • 1.73” H x 17.36” W x 14.51” D • 1U	• 4.4 cm H x 44.1cm W x 37.82cm D • 1.73” H x 17.36” W x 14.89” D • 1U	• 4.4 cm H x 44.1cm W x 36.8cm D • 1.73” H x 17.36” W x 14.51” D • 1U
Net Weight	2.30 kg (5.10 lb)	5.40 kg (11.9 lb)	4.45 kg (9.80 lb)	6.09 kg (13.4 lb)
MTBF	597,684 hours	272,651 hours	407,895 hours	219,440 hours
Physical Ports	• (24) 10/100 ports • (4) 1Gb SFP ports • (2) 10/100/1000 ports • (1) Console port • Max: 28 active ports	• (24) 10/100 PoE ports • (4) 1Gb SFP ports • (2) 10/100/1000 ports • (1) Console port • Max: 28 active ports	• (48) 10/100 ports • (4) 1Gb SFP ports • (2) 10/100/1000 ports • (1) Console port • Max: 52 active ports	• (48) 10/100 PoE ports • (4) 1Gb SFP ports • (2) 10/100/1000 ports • (1) Console port • Max: 52 active ports
Power				
Power Supplies	1 Internal, 1 optional RPS	1 Internal, 1 optional RPS	1 Internal, 1 optional RPS	1 Internal, 1 optional RPS
Normal Input Voltage	100 - 240 VAC	100 - 240 VAC	100 - 240 VAC	100 - 240 VAC
Input Frequency	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
Input Current	0.5A max	7.65A max	0.8A max	7.65A max
Power Consumption	19.8W	31.4 W	33.8 W	45.8W
Environmental				
Operating Temperature	0° to 50° C (32° to 122° F)	0° to 50° C (32° to 122° F)	0° to 50° C (32° to 122° F)	0° to 50° C (32° to 122° F)
Non-Operating Temperature	-40° to 70° C (-40° to 158° F)	-40° to 70° C (-40° to 158° F)	-40° to 70° C (-40° to 158° F)	-40° to 70° C (-40° to 158° F)
Heat Dissipation	66 BTUs/Hr	105 BTUs/Hr	114 BTUs/Hr	153 BTUs/Hr
Operating Relative Humidity	5% to 95% (non-condensing)	5% to 95% (non-condensing)	5% to 95% (non-condensing)	5% to 95% (non-condensing)
Acoustics	Fanless: 0dB	Fan Low Speed: 36dB Fan High Speed: 49dB	Fan Off: 0dB Fan On: 42dB	Fan Low Speed: 39dB Fan High Speed: 49dB

800-Series Switch Model Specifications

	08G20G2-08	08G20G2-08P	08G20G4-24	08G20G4-24P
Performance				
Switching Throughput Mpps	14.9 Mpps	14.9 Mpps	41.7 Mpps	41.7 Mpps
Switching Capacity	20 Gbps	20 Gbps	56 Gbps	56 Gbps
MAC Address Table	16K	16K	16K	16K
VLANs Supported	255	255	255	255
PoE Specifications				
802.3af Interoperable	N/A	Yes	N/A	Yes
802.3at Interoperable	N/A	Yes	N/A	Yes
System Power	N/A	104 watts per switch with up to 30 watts per port Per-port switch power monitor: • Enable/disable • Priority safety • Overload & short circuit protection	N/A	375 watts per switch with up to 30 watts per port Per-port switch power monitor: • Enable/disable • Priority safety • Overload & short circuit protection
Physical Specifications				
Dimensions (H x W x D), Rack Units	• 4.06 cm H x 20.95cm W x 22.2cm D • ”1.60 H x 8.25” W x 8.74” D • 1U	• 4.06 cm H x 20.95cm W x 22.2cm D • 1.60” H x 8.25” W x 8.74” D • 1U	• 4.4 cm H x 44.1cm W x 21.66cm D • 1.73” H x 17.36” W x 8.53” D • 1U	• 4.4 cm H x 44.1cm W x 37.82cm D • 1.73” H x 17.36” W x 14.89” D • 1U
Net Weight	1.50 kg (3.30 lb)	1.86 kg (4.10 lb)	2.35 kg (5.20 lb)	5.54 kg (12.2 lb)
MTBF	865,139 hours	536,628 hours	532,023 hours	275,199 hours
Physical Ports	• (8) 10/100/1000 ports • (2) 1Gb SFP ports • (1) Console port • Max: 10 active ports	• (8) 10/100/1000 ports • (2) 1Gb SFP ports • (1) Console port • Max: 10 active ports	• (24) 10/100/1000 ports • (4) 1Gb SFP ports • (1) Console port • Max: 28 active ports	• (24) 10/100/1000 PoE ports • (4) 1Gb SFP ports • (1) Console port • Max: 28 active ports
Power				
Power Supplies	1 Internal, 1 optional RPS	1 Internal, 1 optional RPS	1 Internal, 1 optional RPS	1 Internal, 1 optional RPS
Normal Input Voltage	100 - 240 VAC	100 - 240 VAC	100 - 240 VAC	100 - 240 VAC
Input Frequency	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
Input Current	0.4A max	2.0A max	0.8A max	7.65A max
Power Consumption	15.9 W	23.3 W	30.0 W	36.4 W
Environmental				
Operating Temperature	0° to 50° C (32° to 122° F)	0° to 50° C (32° to 122° F)	0° to 50° C (32° to 122° F)	0° to 50° C (32° to 122° F)
Non-Operating Temperature	-40° to 70° C (-40° to 158° F)	-40° to 70° C (-40° to 158° F)	-40° to 70° C (-40° to 158° F)	-40° to 70° C (-40° to 158° F)
Heat Dissipation	47 BTUs/Hr	80 BTUs/Hr	100 BTUs/Hr	124 BTUs/Hr
Operating Relative Humidity	5% to 95% (non-condensing)	5% to 95% (non-condensing)	5% to 95% (non-condensing)	5% to 95% (non-condensing)
Acoustics	Fan Off: 0dB Fan On: 38dB	Fan Off*: 0db Fan Low Speed: 38dB	Fan Off: 0dB Fan On: 44dB	Fan Low Speed: 38dB Fan High Speed: 50dB

* requires firmware release 1.02.02
Hardware Rev 5C or higher - 60 watts or less at 30°C or less
Hardware Rev lower than 5C—30 watts or less at 30°C or less

800-Series Switch Model Specifications

	08G20G4-48	08G20G4-48P		
Performance				
Switching Throughput Mpps	77.4 Mpps	77.4 Mpps		
Switching Capacity	104 Gbps	104 Gbps		
MAC Address Table	16K	16K		
VLANs Supported	255	255		
PoE Specifications				
802.3af Interoperable	N/A	Yes		
802.3at Interoperable	N/A	Yes		
System Power	N/A	375 watts per switch with up to 30 watts per port Per-port switch power monitor: • Enable/disable • Priority safety • Overload & short circuit protection		
Physical Specifications				
Dimensions (H x W x D), Rack Units	• 4.4 cm H x 44.1cm W x 37.82cm D • 1.73” H x 17.36” W x 14.89” D • 1U	• 4.4 cm H x 44.1cm W x 37.82cm D • 1.73” H x 17.36” W x 14.89” D • 1U		
Net Weight	4.50 kg (9.90 lb)	6.14 kg (13.5 lb)		
MTBF	369,938 hours	225,591 hours		
Physical Ports	• (48) 10/100/1000 ports • (4) 1Gb SFP ports • (1) Console port • Max: 52 active ports	• (48) 10/100/1000 PoE ports • (4) 1Gb SFP ports • (1) Console port • Max: 52 active ports		
Power				
Power Supplies	1 Internal, 1 optional RPS	1 Internal, 1 optional RPS		
Normal Input Voltage	100 - 240 VAC	100 - 240 VAC		
Input Frequency	50 - 60 Hz	50 - 60 Hz		
Input Current	1.2A max	7.65A max		
Power Consumption	56.1 W	63.1 W		
Environmental				
Operating Temperature	0° to 50° C (32° to 122° F)	0° to 50° C (32° to 122° F)		
Non-Operating Temperature	-40° to 70° C (-40° to 158° F)	-40° to 70° C (-40° to 158° F)		
Heat Dissipation	190 BTUs/Hr	215BTUs/Hr		
Operating Relative Humidity	5% to 95% (non-condensing)	5% to 95% (non-condensing)		
Acoustics	Fan Low Speed: 37dB Fan High Speed: 42dB	Fan Low Speed: 38dB Fan High Speed: 51dB		

800-Series Switch Model Specifications

All Models	
Agency Specifications	
Vibration	IEC 68-2-6, IEC68-2-36
Shock	IEC 68-2-29
Drop	IEC 68-2-32
Altitude - operating	Operational up to 2,000 m 6,561 feet
Safety	UL 60950-1, FDA 21 CFR 1040.10 and 1040.11, CAN/CSA C22.2, No. 60950-1, EN 60950-1, EN 60825-1, EN 60825-2, IEC 60950-1, 2006/95/EC (Low Voltage Directive)
Electromagnetic Compatibility	FCC 47 CFR Part 15 (Class A), ICES-003 (Class A), EN 55022 (Class A), EN 55024, EN 61000-3-2, EN 61000-3-3, AS/NZ CISPR-22 (Class A). VCCI V-3. CNS 13438 (BSMI), 2004/108/EC (EMC Directive)
Environmental	2002/95/EC (RoHS Directive), 2002/96/EC (WEEE Directive), Ministry of Information Order #39 (China RoHS)

Model Number Information

Part Number	Description
800-Series 10/100 Switches	
08H20G4-24	24 port 10/100 800-Series Layer 2 switch with Quad 1Gb uplinks
08H20G4-24P	24 port 10/100 PoE (802.3at) 800-Series Layer 2 switch with Quad 1Gb uplinks
08H20G4-48	48 port 10/100 800-Series Layer 2 switch with Quad 1Gb uplinks
08H20G4-48P	48 port 10/100 PoE (802.3at) 800-Series Layer 2 switch with Quad 1Gb uplinks
800-Series 10/100/1000 Switches	
08G20G2-08	8 port 10/100/1000 800-Series Layer 2 switch with Dual 1Gb uplinks
08G20G2-08P	8 port 10/100/1000 PoE (802.3at) 800-Series Layer 2 switch with Dual 1Gb uplinks
08G20G4-24	24 port 10/100/1000 800-Series Layer 2 switch with Quad 1Gb uplinks
08G20G4-24P	24 port 10/100/1000 PoE (802.3at) 800-Series Layer 2 switch with Quad 1Gb uplinks
08G20G4-48	48 port 10/100/1000 800-Series Layer 2 switch with Quad 1Gb uplinks
08G20G4-48P	48 port 10/100/1000 PoE (802.3at) 800-Series Layer 2 switch with Quad 1Gb uplinks
Optional Redundant Power Supplies	
08A-RPS-24	Redundant Power Supply for 8 port non-PoE 800-Series switch
08A-RPS-130P	Redundant Power Supply for 8 port 802.3at PoE 800-Series switch
08A-RPS-150	Redundant Power Supply for 24 and 48 port non-PoE 800-Series switches (optional shelf mounting listed below)
08A-RPS-500P	Redundant Power Supply for 24 and 48 port 802.3at PoE 800-Series switches
Accessories	
08A-CON-CBL	Console Cable for 800-Series switch
Mounting Options for 8 Port Switches	
D2-LOCKBOX	Metal Lockbox for D2/800-8 Ports
D2-RMT	Rack Mount Kit for D2/800-8 Ports
D2-TBL-MNT	Under Table Mount Kit for D2/800-8 Ports
D2-WALL-MNT	Wall Mount Kit for D2/800-8 Ports
Mounting Options for RPS Units	
STK-RPS-150CH2	2-slot modular power supply shelf (power supply 08A-RPS-150 sold separately)
STK-RPS-150CH8	8-slot modular power supply shelf (power supply 08A-RPS-150 sold separately)

Note: Switches do not ship with a console cable since every switch can be fully managed via a web browser. If Command Line Interface (CLI) management is desired, please order the optional console cable.

Transceivers

Enterasys transceivers provide flexible connectivity options for Ethernet. All Enterasys transceivers meet the highest quality for extended life cycle and the best possible return on investment. For detailed specifications, compatibility and ordering information please go to http://www.enterasys.com/products/transceivers-ds.pdf.

Warranty

As a customer-centric company, Enterasys is committed to providing quality products and solutions. In the event that one of our products fails due to a defect, we have developed a comprehensive warranty that protects you and provides a simple way to get your products repaired or media replaced as soon as possible.

All 800-Series switches come with the Enterasys lifetime warranty against manufacturing defects. For full warranty terms and conditions please go to: www.enterasys.com/support/warranty.aspx.

Service and Support

Enterasys Networks provides comprehensive service offerings that range from Professional Services to design, deploy and optimize customer networks, customized technical training, to service and support tailored to individual customer needs. Please contact your Enterasys account executive for more information about Enterasys Service and Support.

Contact Us

For more information, call Enterasys Networks toll free at 1-877-801-7082, or +1-978-684-1000 and visit us on the web at enterasys.com

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